50

21

machine (e.g., a computing device). For example, a tangible computer readable storage medium may include read only memory, random access memory, magnetic disk storage media, optical storage media, flash memory devices, and others, and a machine-readable transmission media may include forms of propagated signals, such as carrier waves, infrared signals, digital signals, and others. Further, firmware, software, routines, or instructions may be described herein in terms of specific exemplary aspects and implementations of the invention, and performing certain actions. However, it 10 will be apparent that such descriptions are merely for convenience and that such actions in fact result from computing devices, processors, controllers, or other devices executing the firmware, software, routines, or instructions.

Aspects and implementations described herein as includ- 15 ing a particular feature, structure, or characteristic, but every aspect or implementation may not necessarily include the particular feature, structure, or characteristic. Further, when a particular feature, structure, or characteristic is described in connection with an aspect or implementation, it will be under- 20 stood that such feature, structure, or characteristic may be included in connection with other aspects or implementations, whether or not explicitly described. Thus, various changes and modifications may be made to the provided description without departing from the scope or spirit of the 25 invention. As such, the specification and drawings should be regarded as exemplary only, and the scope of the invention to be determined solely by the appended claims.

What is claimed is:

- 1. A portable computing device configured to switch 30 between a plurality of modes that includes a wired zero client mode and a wireless zero client mode, the device comprising: one or more local control processors configured to:
  - execute a controller and gateway on the portable computer device to operate the portable computer device 35 in a local mode that operates independent of a host computer remote from the portable computer device, wherein the one or more local control processors receive input from an input device during the local
  - receive an indication to switch from the local mode to a zero client mode that relies upon the host computer for operation;
  - responsive to the indication to switch from the local mode to the zero client mode comprising an indica- 45 tion to switch from the local mode to the wired zero client mode, discontinue the local mode and the controller and gateway based on the received indication to switch from the local mode to the wired zero client mode; and

one or more zero client processors configured to:

- receive, from the one or more local control processors, at least partial control of the portable computing device when the local mode has been discontinued and based on the indication to switch from the local mode to the 55 zero client mode, wherein the one or more zero client processors receive input from the input device during the zero client mode;
- execute a zero client communication protocol with the host computer, wherein the zero client communica- 60 tion protocol facilitates the host computer communicating to the one or more zero client processors only display information based on a process executing at the host computer; and
- responsive to the indication to switch from the local 65 mode to the zero client mode comprising an indication to switch from the local mode to the wired zero

22

- client mode, establish a wired communication channel with the host computer remote from the portable computing device independent of the controller and gateway during the wired zero client mode.
- 2. The portable computing device of claim 1, wherein, responsive to the indication to switch from the local mode to the zero client mode comprising an indication to switch from the local mode to the wireless zero client mode, the one or more local control processors are further configured to:
  - discontinue the local mode based on the received indication to switch from the local mode to the wireless zero client mode; and
  - operate a wireless communication protocol by the controller and gateway based on the indication to switch from the local mode to the wireless zero client mode,
  - wherein the controller and gateway facilitates wireless communication between the host computer and the one or more zero client processors during the wireless zero client mode
- 3. The portable computing device of claim 2, wherein the one or more zero client processors are further configured to: receive the display information from the host computer based on the wireless communication protocol and via the controller and gateway executed by the one or more local control processors.
  - 4. The portable computing device of claim 1,
  - wherein responsive to the indication to switch from the local mode to the zero client mode comprising the indication to switch from the local mode to the wired zero client mode,
  - the one or more zero client processors are further configured to:
    - receive input from the input device during the wired zero
    - execute a zero client communication protocol with the host computer, wherein the zero client communication protocol facilitates the host computer communicating to the one or more zero client processors only display information based on a process executing at the host computer;
    - receive an indication to switch from the wired zero client mode to the wireless zero client mode;
    - discontinue, based on the indication to switch to the wireless zero client mode, the wired communication channel: and
    - provide, to the one or more local control processors of the portable computing device, at least partial control of the portable computing device when the wired zero client mode has been discontinued and based on the indication to switch to the wireless zero client mode, wherein the one or more local control processors are configured to:
      - operate a wireless communication protocol by the controller and gateway based on the indication to switch from wired zero client mode to the wireless zero client mode; and
      - facilitate, by the controller and the gateway, wireless communication between the host computer and the one or more zero client processors during the wireless zero client mode.
  - 5. The portable computing device of claim 1,
  - wherein, responsive to the indication to switch from the local mode to the zero client mode comprising an indication to switch from the local mode to the wireless zero client mode,
  - the one or more local control processors are further configured to: